

IN THE CLAIMS:

The following is a complete list of the claims now pending; this listing replaces all earlier versions and listings of the claims.

Claim 1 (currently amended): A data communication system comprising:

a source node; and

one or more destination nodes,

wherein ~~the~~ said source node is adapted to set a segment size in accordance with reception capabilities of ~~the~~ said one or more destination nodes in order to segment object data into one or more segments, to segment the object data into one or more segments in accordance with the segment size, and to transfer data in each segment to ~~the~~ said one or more destination nodes via a logical connection.

Claim 2 (currently amended): A data communication system according to

~~Claim~~ claim 1, wherein ~~the~~ said source node is adapted to transfer data continuously in each segment to ~~the~~ said one or more destination nodes via the logical connection.

Claims 3 - 7 (canceled)

Claim 8 (currently presented): A data communication system according to ~~Claim~~ claim 1, wherein ~~the~~ said source node is adapted to set the segment size in accordance with ~~the~~ a size of a receiving buffer in each destination node.

Claim 9 (currently amended): A data communication system according to ~~Claim~~ claim 1, wherein ~~the~~ said source node is adapted to set the segment size in accordance with a maximum payload size of a packet received by each destination node.

Claim 10 (currently amended): A data communication system according to ~~Claim~~ claim 1, wherein ~~the~~ said source node is adapted to set the segment size in accordance with the lowest reception capability.

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Claim 11 (currently amended): A data communication system according to ~~Claim~~ claim 1, wherein the segment size of each segment is variable.

Claims 12-19 (canceled)

Claim 20 (currently amended): A data communication system according to ~~Claim~~ claim 1, wherein ~~the~~ said data communication system is a serial bus system.

Claim 21 (currently amended): A data communication system according to ~~Claim claim~~ 1, wherein ~~the said~~ data communication system conforms to IEEE 1394-1995 standard.

Claim 22 (currently amended): A data communication system according to ~~Claim claim~~ 1, wherein the object data is ~~one of~~ includes image data, ~~audio data, graphics data,~~ and text data.

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Claim 23 (canceled)

Claim 24 (currently amended): A data communication method of transferring object data from a source node to one or more destination nodes via a logical connection, ~~the said~~ method comprising:

a setting step, of setting a segment size in accordance with reception capabilities of the one or more destination nodes in order to segment the object data into one or more segments;

a segmentation step, of segmenting the object data into one or more segments in accordance with the segment size; and

a transfer step, of transferring data in each segment from the source node to the one or more destination nodes via the logical connection.

Claims 25 - 27 (canceled)

Claim 28 (currently amended): A data communication apparatus ~~that transfers~~
~~object data to destination nodes via a logical connection, the apparatus comprising:~~

~~setting means for setting a control unit adapted to set a segment size in
accordance with reception capabilities of the one or more destination nodes in order to segment
object data into one or more segments, and to segment the object data into one or more segments
in accordance with the segment size;~~

~~segmenting means for segmenting the object data into one or more
segments in accordance with the segment size; and~~

~~transferring means for transferring a digital interface adapted to transfer
data in each segment to ~~the~~ one or more destination nodes via ~~[[the]]~~ a logical connection.~~

Claims 29 - 33 (canceled)

Claim 34 (currently amended): A data communication method according to
claim 24, wherein ~~the~~ said transfer step includes continuously transferring data in each segment
from the source node to the one or more destination nodes via the logical connection.

Claim 35 (currently amended): A data communication method according to claim 24, wherein ~~the~~ said setting step includes setting the segment size in accordance with ~~the~~ a size of a receiving buffer in each destination node.

Claim 36 (currently amended): A data communication method according to claim 24, wherein ~~the~~ said setting step includes setting the segment size in accordance with a maximum payload size of a packet receivable by each destination node.

Claim 37 (currently amended): A data communication method according to claim 24, wherein ~~the~~ said setting step includes setting the segment size in accordance with the lowest reception capability.

Claim 38 (previously presented): A data communication method according to claim 24, wherein the segment size of each segment is variable.

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Claim 39 (currently amended): A data communication method according to claim 24, wherein ~~the~~ said data communication method is applicable to a serial bus system.

Claim 40 (currently amended): A data communication method according to claim 24, wherein ~~the~~ said data communication method is applicable to IEEE 1394-1995 standard.

Claim 41 (currently amended): A data communication method according to claim 24, wherein the object data is ~~one of~~ includes image data, audio data, graphics data, and text data.

Claim 42 (currently amended): A data communication apparatus according to claim 28, wherein ~~the transferring means~~ said digital interface is adapted to continuously transfer data in each segment to the one or more destination nodes via the logical connection.

C1 Claim 43 (currently amended): A data communication apparatus according to claim 28, wherein ~~the setting means~~ said control unit is adapted to set the segment size in accordance with ~~the~~ a size of a receiving buffer in each destination node.

Claim 44 (currently amended): A data communication apparatus according to claim 28, wherein ~~the setting means~~ said control unit is adapted to set the segment size in accordance with a maximum payload size of a packet receivable by each destination node.

Claim 45 (currently amended): A data communication apparatus according to claim 28, wherein ~~the setting means~~ said control unit is adapted to set the segment size in accordance with the lowest reception capability.

Claim 46 (previously presented): A data communication apparatus according to claim 28, wherein the segment size of each segment is variable.

Claim 47 (currently amended): A data communication apparatus according to claim 28, wherein ~~the~~ said apparatus and the one or more destination nodes are in a serial bus system.

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Claim 48 (currently amended): A data communication apparatus according to claim 28, wherein ~~the~~ said apparatus and the one or more destination nodes are in a system that conforms to IEEE 1394-1995 standard.

Claim 49 (currently amended): A data communication apparatus according to claim 28, wherein the object data is ~~one of~~ includes ~~image data, audio data, graphics, data, and~~ text data.